

## ABSTRACT

To control a flow rate ranging from an extremely-low rate to a high rate, particularly, to control an extremely-low flow rate accurately, the following processes are executed. A regulator, a flow rate adjustment valve connected in series downstream of the regulator and adjusting a valve opening of its valve provided to a passage, and a flow rate sensor are provided. A regulator controlled degree and a valve opening controlled degree of the flow rate adjustment are found in accordance with a detection value and a target flow rate value to control the flow rate.